

## OPINION 563

### INTERPRETATION UNDER THE PLENARY POWERS OF THE NOMINAL SPECIES "APHIS PADI" LINNAEUS, 1758 (CLASS INSECTA, ORDER HEMIPTERA)

**RULING** :—(1) Under the Plenary Powers it is hereby directed that the nominal species *Aphis padi* Linnaeus, 1758, be interpreted by reference to the description published for that nominal species by Schrank in 1801 (*Fauna boica* 2 : 115).

(2) The under-mentioned specific name is hereby placed on the *Official List of Specific Names in Zoology* with the Name Number 1649 :—

*padi* Linnaeus, 1758, as published in the combination *Aphis padi*, and interpreted in accordance with the direction given under the Plenary Powers in (1) above (Class Insecta, Order Hemiptera).

#### I. THE STATEMENT OF THE CASE

On 16th May 1957 Dr. J. P. Doncaster (*British Museum (Natural History), London*) submitted to the Commission the following application in which he asked that the Plenary Powers be used to direct that the specific name *padi* Linnaeus, 1758, as published in the combination *Aphis padi*, be interpreted by reference to Schrank (1801), thereby securing a firm basis for the continued use of that name for the species known as the European Bird Cherry Aphid :—

**Proposed use of the Plenary Powers to validate the application of the specific name "padi" Linnaeus, 1758, as published in the combination "Aphis padi" to the European Bird Cherry Aphid (Class Insecta, Order Hemiptera)**

By J. P. DONCASTER  
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It is the purpose of the present application to ask the International Commission on Zoological Nomenclature to use its Plenary Powers to validate the application of the specific name *padi* Linnaeus, 1758, as published in the combination *Aphis padi*, to the common European Bird Cherry Aphid, in order to preserve a name which is appropriate and in common use, but the application of which in this sense is invalid according to the Rules.

2. The name *Aphis padi* Linnaeus is, and has been, applied by the majority of aphidologists to the European Bird Cherry Aphid, which, with the exception of one rather rare species, is the only aphid known to use *Prunus padus* as a primary host in Europe, although, according to the Rules, it would seem to apply to a totally unrelated species, the Mealy Plum Aphid. As the name *pruni* Geoffroy, 1762, has already been placed on the *Official List* for the Mealy Plum Aphid (*Opinion* 397, July, 1956) *padi* cannot supplant it (*Bull. zool. Nomencl.* 4 : 270, Conclusion 42(1)(b)), but the name *padi* cannot now be used in any other sense without appropriate action by the Commission.

3. Linnaeus (*Syst. Nat.* (Ed. 10) 1 : 451) gives the following entry under the heading "APHIS" :

Padi. 7. A. Pruni Padi,  
*Reaum. ins.* 3. t. 23. f. 9. 10.  
*Habitat in Pruno Pado.*

4. As Linnaeus, did not describe *padi* and his citation of a host species (*Prunus padus*) does not, according to Conclusion 21 of the Commission (*Bull. zool. Nomencl.* 4 : 256), in itself constitute an "indication", the aphid can be identified only from the citation of Réaumur's figures 9 and 10, which show aphids attacking leaves of plum. It must be accepted that the description in Réaumur's text (p. 317), relating to these figures is to be identified as the Mealy Plum Aphid, as this has been decided by *Opinion* 397. But as the reference to Réaumur cited for *padi* is identical with that cited for *pruni*, it would therefore appear that *padi* must, on the same reasoning, also be the Mealy Plum Aphid, unless it is contended that either or both of Réaumur's figures depict a species different from the one he described, for which there appears to be no valid evidence. Indeed, not only does Réaumur's description of the Mealy Plum Aphid (p. 317) include a reference to both figures 9 and 10 together, but earlier in his account (p. 296) he seems to imply that these figures illustrate two different sorts of damage caused by the same species.

5. This view, however, was not accepted by Theobald (1927, *Aphididae of Gt. Britain* 2 : 403) who, though he did not doubt that Réaumur's figure 9 applied to the Mealy Plum Aphid, considered that figure 10 applied to the unrelated Leaf-curling Plum Aphid and restricted the name *padi* to the latter. Theobald's interpretation was followed by many entomologists, who consequently found themselves at variance with other workers ; but, in any case, the divergence of opinion on the identity of *Aphis padi* Linnaeus would appear to show that, if it is not the Mealy Plum Aphid, it must be considered unidentifiable.

6. The case for validating the name *padi* for the Bird Cherry Aphid is strong. Not only is the name highly appropriate in that it indicates the only known primary host of the species in Europe, but most authors of major works on aphid systematics have used the name *padi* in this sense. They include Schrank, who published the first clearly recognisable description of the Bird Cherry Aphid under this name (1801, *Fauna boica* 2 : 115), Kaltenbach, Walker, Koch, del Guercio, van der Goot, Mordvilko, Börner and Hille Ris Lambers. The morphology and biology of the Bird Cherry Aphid have been described by Rogerson (1947, *Bull. ent. Res.* 38(1) : 158), who used the now widely accepted combination *Rhopalosiphum padi* (Linnaeus). The validation of *padi* for the Bird Cherry Aphid, therefore, would stabilise a name already well established and about the application of which there is a wide measure of agreement.

7. Although, as already noted, the citation of a host plant unaccompanied by any description does not constitute a valid "indication" under the existing *Règles*, it cannot be doubted that, when Linnaeus cited *Prunus padus* as the host for his species *Aphis padi*, he intended to convey that that name applied to the European Bird Cherry Aphid, since the citation of that host is entirely inappropriate for the species figured by Réaumur on the plate cited by Linnaeus. Thus, a solution on the lines now recommended would not only serve the valuable purpose of stabilising the name for the European Bird Cherry Aphid but would also be in harmony with the intention of Linnaeus, even though under the present *Règles* he failed to give effect to that intention.

8. For the reasons stated above, the International Commission on Zoological Nomenclature is now asked :—

(1) to use its Plenary Powers to direct that the nominal species *Aphis padi*

Linnaeus, 1758, be interpreted by reference to the description given therefor by Schrank in 1801 (*Faun. boic.* 2 : 115) ;

(2) to place the under-mentioned specific name on the *Official List of Specific Names in Zoology* :—

*padi* Linnaeus, 1758, as published in the combination *Aphis padi*, the entry so to be made to be endorsed that the nominal species so named be interpreted in accordance with the directions given under the Plenary Powers in (1) above.

## II. THE SUBSEQUENT HISTORY OF THE CASE

**2. Registration of the present application :** Upon the receipt of Dr. Doncaster's application, the question of the possible use of the Plenary Powers for the purpose of interpreting the nominal species *Aphis padi* Linnaeus, 1758, was allotted the Registered Number Z.N.(S.)1225.

**3. Publication of the present application :** The present application was sent to the printer on 22nd May 1957 and was published on 26th August of the same year in Part 8 of Volume 13 of the *Bulletin of Zoological Nomenclature* (Doncaster (J.P.), 1957, *Bull. zool. Nomencl.* 13 : 248–250).

**4. Issue of Public Notices :** Under the revised procedure prescribed by the Thirteenth International Congress of Zoology, Paris, 1948 (1950, *Bull. zool. Nomencl.* 4 : 51–56), Public Notice of the possible use by the International Commission on Zoological Nomenclature of its Plenary Powers in the present case was given on 26th August 1957 (a) in Part 8 of Volume 13 of the *Bulletin of Zoological Nomenclature* (the Part in which Dr. Doncaster's application was published) and (b) to the other prescribed serial publications. In addition, such Notice was given also to four general zoological serial publications and to seven entomological serials in Europe and America.

**5. Support received from Miss Miriam A. Palmer :** On 29th October 1957 Miss Miriam A. Palmer (*Colorado State University, Department of Entomology, Fort Collins, Colorado, U.S.A.*) addressed to the Office of the Commission the following letter in support of the application submitted in the present case (Palmer (M.A.), 1957, *Bull. zool. Nomencl.* 16 : 48) :—

Doncaster's paper regarding *Aphis padi* has just been received.

I favor the action proposed therein, namely : to validate the name *Aphis padi* Linnaeus as applying to the European bird cherry aphid.

**6. No Objection Received :** No objection to the present application was received from any source.

## III. THE DECISION TAKEN BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

**7. Issue of Voting Paper V.P.(58)6 :** On 17th March 1958, a Voting Paper (V.P.(58)6) was issued in which the Members of the Commission were invited to vote either for, or against, " the proposal relating to the interpretation of the nominal species *Aphis padi* Linnaeus, 1758 (Class Insecta, Order Hemiptera),